

In the Claims

1. (Currently Amended) A color reproduction system with drift correction, comprising:

an output device having a set of tone reproduction compensation curves for rendering an image on a recording medium;

said output device generating, using said set of tone reproduction compensation curves, an output document having a plurality of color test patches;

a scanner for scanning a said output document having said plurality of color test patches to generate scanned image data representative of said plurality of color test patches~~the document~~, the scanned image data providing a color representation of said plurality of color test patches~~the document~~; an output device for generating an output document in response to print ready data; and

an image processing system receiving the said scanned image data and generating the print ready data;

said the image processing system device further comprising including,

a calibration target generator to generate, from a set of digital signals, a calibration target, to be printed, comprising a set of digital signals~~representing a plurality of color test patches,~~

a calibration conversion processor for converting to convert the scanned image data into a set of device independent color signals,

a calibration processor for computing a set of color shift correction signals by comparing the set of device independent color signals representative of a printed version of said calibration target with a set of desired color signals~~the stored representation thereof, and,~~

an adjustment processor operating to re-calculate a set of tone reproduction compensation curves adjust a characteristic of the print ready data in response to said color shift correction signals and to cause said re-calculated set of tone reproduction compensation curves to replace the set of tone reproduction compensation curves in said output device.

2. (Original) The apparatus of claim 1 wherein the conversion processor uses a 3 dimensional lookup table.

Claims 3-4 (Cancelled)

5. (Currently Amended) The apparatus of claim 1 wherein said adjustment processor re-calculates the set of tone reproduction compensation curves—the characteristic of the print ready data that is adjusted—is done in such a way as to maintain the overall gray balance of the said output device.

Claim 6 (Cancelled)

7. (Original) The apparatus of claim 1 wherein the calibration target has a plurality of patches that are neutral or near neutral in color.

8. (Original) The apparatus of claim 1 wherein the scanner may be separate from the other elements and connected thereto by a network.

9. (Currently Amended) A method of maintaining the reproduction properties of a color reprographic device comprising:

causing the color reprographic device to print a copy of a stored test pattern containing a plurality of colored patches;

scanning the printed target with a scanner to obtain a first set of color signals;

processing ~~said—the~~ first set of color signals to obtain an average device dependent color values for ~~the color of~~ each patch in the test target;

converting the further processing said average values using a color conversion processor to obtain a device independent color values for each patch in the test target;

comparing the device independent color values to a stored set of standard values to generate a set of color shift correction signals;

re-calculating a set of tone reproduction compensation curves in response to the set of color shift correction signals; and

replacing a set of tone reproduction compensation curves in the color reprographic device with the re-calculated set of tone reproduction compensation

~~curves from the comparison between the measured and the standard values deriving a correction that can be applied to the output means of the color reprographic device to restore it to a standard condition.~~

10. (Original) The method of claim 9, wherein the color conversion processor uses a 3 dimensional lookup table.

Claims 11-12 (Cancelled)

13. (Currently Amended) The method of claim 9 wherein the set of tone reproduction compensation curves are re-calculated ~~correction that is applied to the output mean is done in such a way as~~ to maintain the overall gray balance of the output device.

Claims 14-15 (Cancelled)